

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (previously presented): A local assurance management device for a network element in a communication network equipped with a network management system, where said network element presents a chosen configuration and comprises means for measuring parameter values in the network, and a built-in management information base used to store management data which are representative of said measured parameter values, wherein the device comprises management means which are arranged to adapt the configuration of said network element according to at least said management data stored in said management information base, and chosen rules, known as assurance rules, defining a local assurance policy, where said adaptation comprises a change to a measurement policy parameter and/or a change to a report transmission policy to said network management system.
2. (previously presented): A device according to claim 1, wherein said management means are arranged so as to adapt said configuration according to information data coming from at least one other network element.
3. (previously presented): A device according to claim 1, wherein said adaptation comprises a change to a method of operation of said network element.
4. (previously presented): A device according to claim 1, wherein said management means include analysis means arranged so as to determine, in accordance with certain of said chosen

assurance rules, information data representing the changes in time, over a chosen interval, of parameter values in the network stored in said management information base.

5. (previously presented): A device according to claim 4, wherein said analysis means are arranged so as to deliver information data representing a trend analysis and/or an analysis of profiles or signatures and/or an analysis of discontinuity and/or an aggregation of network parameter values.

6. (previously presented): A device according to claim 4, wherein said analysis means are configurable.

7. (previously presented): A device according to claim 6, wherein said analysis means are arranged so as perform fresh calculations relating to the network parameters received from said network management system.

8. (previously presented): A device according to claim 1, wherein said management means include alarm means able to trigger the sending of an alarm and/or of information data to said network management system and/or to at least one other network element, in accordance with certain of said chosen assurance rules.

9. (previously presented): A device according to claim 8, wherein said alarm means are configurable.

10. (previously presented): A device according to claim 8, wherein said information data and said alarms are representative of the results of analyses performed by an analysis means, and/or of data aggregation, effected by said analysis means, and/or of a network parameter value stored in said management information base.

11. (previously presented): A device according to claim 1, wherein said management means include network observation means defining a flow measurement agent of the end-to-end type, arranged so as to determine information data which are representative of said flow of the end-to-end type in accordance with certain of said chosen assurance rules.

12. (previously presented): A device according to claim 11, wherein said network observation means are configurable.

13. (previously presented): A device according to claim 1, wherein said management means include means for the management of service level agreements or SLAs, arranged so as to determine information data representing said agreement management in accordance with certain of said chosen assurance rules.

14. (previously presented): A device according to claim 13, wherein said service level agreement management means are configurable.

15. (previously presented): A device according to claim 2, wherein said management means include monitoring means which are able to manage the operation of an analysis means, of an

alarm means, of a network observation means and of the service level agreement management means, in accordance with at least some of said chosen assurance rules.

16. (previously presented): A device according to claim 15, wherein said monitoring means are supplied with information data by said analysis means and/or said network observation means and/or the service level agreement management means (SM4), and are arranged so as to order said alarm means to generate alarms and/or reports in the event of detecting non-compliance with an assurance rule by received the information data.

17. (previously presented): A device according to claim 15, wherein said monitoring means are arranged in the form of a rule engine storing said chosen assurance rules.

18. (previously presented): A device according to claim 15, wherein said monitoring means are configurable.

19. (previously presented): A device according to claim 1, wherein said management means are capable of being configured by said network management system via an application programming interface of said network element.

20. (previously presented): A device according to claim 1, wherein said management means are capable of being configured by said network management system via an application programming interface of said network element and via said management information base.

21. (previously presented): A device according to claim 19, wherein said analysis means and/or said alarm means and/or said network observation means and/or said monitoring means and/or the service level agreement management means are capable of being configured by said network management system, via said application programming interface.

22. (previously presented): A device according to claim 20, wherein said analysis means and/or said alarm means and/or said network observation means and/or said monitoring means and/or the service level agreement management means are capable of being configured by said network management system, via said application programming interface and via said management information base.

23. (previously presented): A device according to claim 1, wherein said management means are capable of being configured by said network management system using dedicated commands.

24. (previously presented): A device according to claim 23, wherein said analysis means and/or said alarm means and/or said network observation means and/or said service level agreement management means and/or said monitoring means are arranged so as to be capable of being configured by said network management system using dedicated commands.

25. (previously presented): A device according to claim 23, wherein said commands are of the "Command Line Interface" type.

26. (previously presented): A network element for a communication network equipped with a network management system, where said network element presents a chosen configuration and including means for the measurement of parameter values in the network and a management information base capable of storing management data representing said parameter values, wherein the network element comprises a device or arrangement (D) in accordance with claim 1.

27. (previously presented): A network element in accordance with claim 26, further comprising an application programming interface, and wherein said management information base is capable of being configured by said network management system via said application programming interface.

28. (previously presented): A network element in accordance with claim 26, further comprising an application programming interface, and wherein said management information base is capable of being programmed by said network management system via said application programming interface.

29. (previously presented): A network element in accordance with claim 26, wherein the network element is chosen from a group which includes at least one of routers, switches and firewalls.

30. (currently amended): A communication network according to claim 26, comprising a network management system, wherein the communication network comprises a large

~~variety~~plurality of different network elements comprising at least one of a server equipped with a firewall, a switch, an edge router or a core router.

31. (previously presented): A network in accordance with claim 30, wherein each network element is arranged to deliver alarms and/or information data of various types to said network management system.

32. (previously presented): A method of managing network technologies comprising:
applying a local assurance management device for a network element in a communication network equipped with a network management system,

wherein said network element presents a chosen configuration and comprises means for measuring parameter values in the network, and a built-in management information base used to store management data which are representative of said measured parameter values, and

wherein the device comprises management means which are arranged to adapt the configuration of said network element according to at least said management data stored in said management information base, and chosen rules, known as assurance rules, defining a local assurance policy, where said adaptation comprises a change to a measurement policy parameter and/or a change to a report transmission policy to said network management system.

33. (currently amended): A method according to claim 32, wherein said network technologies are chosen from a group which includes transmission networks, comprising at least one of a Wavelength-Division Multiplexing (~~WDM~~), a Synchronous Optical NETwork (~~SONET~~) and a Synchronous Digital Hierarchy (~~SDH~~) type, management networks, of the

Internet-IP and Asynchronous Transfer Mode (~~ATM~~) type, and speech networks, of the
conventional, mobile and Next Generation Network (~~NGN~~) type.